

Comparison of *Helicobacter pylori* infection (HP) frequency in the cardia and distal esophageal cancer patients with healthy individuals

Abstract

Introduction

Helicobacter pylori is a major risk factor for gastric non-cardia adenocarcinoma, but have observed a weak association between this infection and gastric cardiac adenocarcinoma. Given to the incidence of gastric (cardia) and esophageal cancers in Ardabil province, we decided to study the prevalence of infection among patients with esophageal and gastric cardia cancers and healthy people.

Material and Methods

In this descriptive and analytical study, 144 persons were enrolled in two groups and 72 persons in each that the first group was controls who were assigned with normal endoscopy randomly; and the second group was with gastric cardiac cancer. First, the patients' profiles were recorded in to check lists that have been already made and patients stool samples were sent to a lab. After receiving the lab reports, along with information on the check lists, the data were analyzed.

Results

In this study 59.7 % of cases and 48.6% of controls were men ($p=0.181$) and the average age was 64.15years ($p=0.240$). In cases 40.27% and in controls 23.61% were smokers. BMI in cases and in controls were 25.10 and 25.01 respectively ($p=0.123$). The most common clinical symptom was dyspepsia in 44.94% of the patients. 27.8% of cases and 22.2% of controls were with positive gastrointestinal cancer history ($p<0.001$). 45.8% and 54.2% of patients were with cardia and distal esophagus cancers respectively. The results showed that the incidence of infection in cases were lower than the controls ($p=0.012$) (OR: 0.429; CI=0.220-0.836). It was also observed that there was no significant relationship between age ($p=0.608$) and gender ($p=0.380$) of persons with incidence of infection.

Conclusion

The results of this study showed that *Helicobacter Pylori* infection may play a protective role in the development of esophagus and cardia cancers.

Key words: *Helicobacter pylori*, cardia cancer, esophagus cancer